# Chillers & Fan Coil Units

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## CHILLERS


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## FAN COIL UNITS


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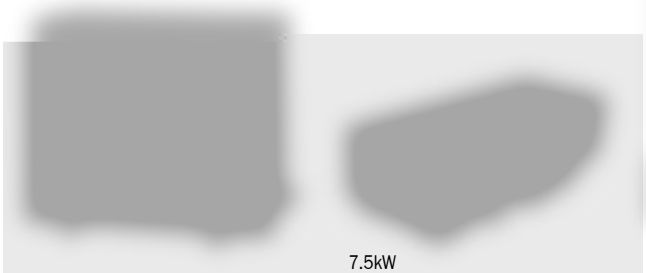
# MINI CHILLERS R410A

## Integral Type

21.5kW-42kW

## Split Type



7.5kW

10kW-14.2tkW

### Integral type

- Flexible installation thanks to slope up discharge structure.
- Water pump.
- Expansion vessel.
- Water flow switch kit.
- LCD thermostat.
- Safety valve, auto water replenishing valve, auto air evacuation valve.
- IMCR355Na-M and IMCR455Na-M, also available without hydranlic kit, with modular structure (up to 16 units) achiving maximum capacity of 720kW.

### Split type

- Detached cooler/heater design, which make installation more flexible.
- Compact design, the height of the cooler/heater is only 288mm.
- Wide operation range of heat mode in cold season, thanks for the cooler/heater can be installed in indoor ceiling void to avoid freezing problem.
- Water pump.
- Expansion vessel.
- Water flow switch kit.
- LCD thermostat.
- Safety valve, auto water replenishing valve, auto air evacuation valve

Memory function

Two circuits

Quiet design

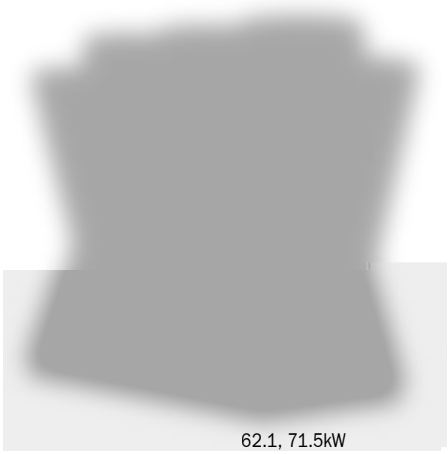
| ITEM | Water side side | | | | Air side | | |
|---|---|---|---|---|---|---|---|
| | Nominal Operating Condition | | Operating Range | | Nominal Operating Condition | | Operating Range |
| | Inlet water temp. (°C) | Outlet water temp. (°C) | Outlet water temp. (°C) | Temp. Difference between inlet & outlet (°C) | Outdoor temp. (DB°C) | Outdoor temp. (WB°C) | Outdoor temp. (DB°C) |
| Cooling | 12 | 7 | 7 -12 | 3 - 8 | 35 | / | 16 - 43 |
| Heating | 40 | 45 | 40 - 50 | 3 - 8 | 7 | 6 | -15 - 28 |

# MINI CHILLERS R410A

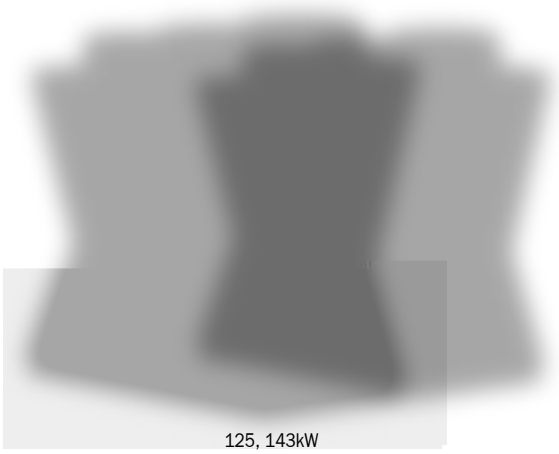
| Split Type | | | | | | |
|---|---|---|---|---|---|---|
| MODEL | Heat pump | | IMCR8WZNa-M | IMCR10WZNa-M | IMCR12.5WZNa-M | IMCR15WZNa-M |
| Capacity | Cooling (kW) | | 7.5 | 10.0 | 12.5 | 14.2 |
| | Heating (kW) | | 9.0 | 12.0 | 13.0 | 16.5 |
| EER (W/W) | | | 2.1 | 2.2 | 2.2 | 2.5 |
| COP (W/W) | | | 2.7 | 2.7 | 2.7 | 3.1 |
| Power supply (V/Ph/Hz) | | | 380 - 415V/3Ph/50Hz | | | |
| Power input | Cooling (kW) | | 3.5 | 4.4 | 5.7 | 5.7 |
| | Heating (kW) | | 3.3 | 4.4 | 4.8 | 5.3 |
| Compressor quantity (Unit) | | | 1 | 1 | 1 | 1 |
| Refrigerant charge volume (kg) | | | 3.1 | 3.55 | 4.5 | 5.5 |
| Build-in chilled water pump | Water flow volume | $m^3/h$ | 1.4 | 1.7 | 2.1 | 2.6 |
| | | l/s | 0.38 | 0.48 | 0.59 | 0.72 |
| | Head of delivery (m) | | 18 | 18 | 18 | 18 |
| | Power input (W) | | 550 | 550 | 550 | 550 |
| Build-in expansion tank volume (L) | | | 5 | 5 | 5 | 5 |
| Chilled water outlet/inlet dimension (Inch) | | | 1" Female BSP | 1" Female BSP | 1" Female BSP | 1" Female BSP |
| Indoor unit | Outline dimension (WxDxH) (mm) | | 1.100x450x288 | 1.100x450x288 | 1.100x450x288 | 1.100x450x288 |
| | Packaged dimension (WxDxH) (mm) | | 1.285x682x385 | 1.285x682x385 | 1.285x682x385 | 1.285x682x385 |
| | Net weight (kg) | | 84 | 84 | 84 | 84 |
| | Gross weight (kg) | | 96 | 96 | 96 | 96 |
| | Sound pressure level (dB(A)) | | 38 | 38 | 38 | 38 |
| Outdoor unit | Outline dimension (WxDxH) (mm) | | 950x412x840 | 950x412x1.250 | 950x412x1.250 | 950x412x1.250 |
| | Packaged dimension (WxDxH) (mm) | | 1.100x450x985 | 1.100x450x1.385 | 1.100x450x1.385 | 1.100x450x1.385 |
| | Net weight (kg) | | 90 | 112 | 115 | 123 |
| | Gross weight (kg) | | 100 | 123 | 126 | 134 |
| | Sound pressure level (dB(A)) | | 60 | 60 | 60 | 60 |
| Connection pipe | Liquid (Inch) | | 1/2 | 1/2 | 1/2 | 1/2 |
| | Gas (Inch) | | 3/4 | 3/4 | 3/4 | 3/4 |

| Integral Type | | | | | | |
|---|---|---|---|---|---|---|
| MODEL | Heat pump | | IMCR22SNa-M | IMCR25SNa-M | IMCR35SNa-M | IMCR45SNa-M |
| Capacity | Cooling (kW) | | 21.5 | 22.8 | 31.0 | 42.0 |
| | Heating (kW) | | 25.0 | 25.0 | 37.5 | 49.0 |
| EER (W/W) | | | 2.50 | 2.60 | 2.60 | 2.30 |
| COP (W/W) | | | 2.90 | 2.80 | 3.00 | 2.80 |
| Power supply (V/Ph/Hz) | | | 380 - 415V/3Ph/50Hz | | | |
| Power input | Cooling (kW) | | 8.6 | 8.8 | 11.9 | 18.3 |
| | Heating (kW) | | 8.6 | 8.9 | 12.5 | 17.5 |
| Compressor quantity unit | | | 2 | 2 | 2 | 2 |
| Refrigerant charge volume (kg) | | | 3.6 x 2 | 4.8 x 2 | 6.5 x 2 | 7.3 x 2 |
| Build-in chilled water pump | Water flow volume | $m^3/h$ | 3.8 | 4.3 | 5.0 | 7.9 |
| | | l/s | 1.05 | 1.2 | 1.4 | 2.2 |
| | Head of delivery (m) | | 22 | 24 | 25 | 27 |
| | Power input (W) | | 750 | 750 | 1500 | 1500 |
| Build-in expansion tank volume (L) | | | 8 | 8 | 8 | 8 |
| Chilled water outlet/inlet dimension (Inch) | | | 1" Female BSP | 1" Female BSP | 1-1/2" Female BSP | 1-1/2" Female BSP |
| Dimension | Outline (WxDxH) (mm) | | 1.460x530x1.850 | 1.460x530x1.850 | 1.750x800x1.760 | 1.750x800x1.760 |
| | Packaged (WxDxH) (mm) | | 1.540x710x2.100 | 1.540x710x2.100 | 1.910x960x1.970 | 1.910x960x1.970 |
| Net weight (kg) | | | 370 | 390 | 680 | 755 |
| Gross weight (kg) | | | 380 | 400 | 690 | 765 |
| Sound pressure level (dB(A)) | | | 66 | 66 | 68 | 68 |

# MODULAR AIR COOLED SCROLL CHILLERS R410A



62.1, 71.5kW



125, 143kW

- Flexible main module patent, any unit can be set as main module just by connected with wired controller
- High efficient heat operation even in low temperature and high humidity thanks to real time intelligent defrost mode and gas discharging feed-through structure
- Low start-up current thanks to power delay control design
- Special top cover design: make a better cooling capacity of 5% improvement and higher efficiency of 3% improvement
- Modular operation optional, up to 16 units (65/80kW) 8 units (130/160kW) can be integrated
- Saving installation space by 35% compared to conventional design
- Multi compressor paralleling technology to guarantee longer usage life
- Completed safeties
- Quiet mode available
- Throttling controlled by electronic expansion valve, more accurate and rapid
- Wide ambient range ensures stable operation in extreme climate
- Golden fin condenser

Modular structure

Intelligent defrosting

Diagnosis displaying

Multi circuits

Wired controller

For Heat Pump Units Only

| ITEM | Water side | | | | Air side | | |
|---|---|---|---|---|---|---|---|
| | Nominal Operating Condition | | Operating Range | | Nominal Operating Condition | | Operating Range |
| | Inlet water temp. (°C) | Outlet water temp. (°C) | Outlet water temp. (°C) | Temp. Difference between inlet & outlet (°C) | Outdoor temp. (DB°C) | Outdoor temp. (WB°C) | Outdoor temp. (DB°C) |
| Cooling | 12 | 7 | 5 -15 | 2.5 - 8 | 35 | / | 5 - 46 |
| Heating | 40 | 45 | 40 - 50 | 2.5 - 8 | 7 | 6 | -15 - 24 |

# CHILLERS

# MODULAR AIR COOLED SCREW CHILLERS R134a

230 - 430kW

- Running condition real-time display
- Low start-up current thanks to power delay control design
- Multistep adjustment plus modular design makes a better unloading capacity that ensures the stability of water temperature. Double-flow design makes a higher heat exchange efficiency.
- Double spray cooling design to both compressor chamber and motor, ensure the reliable operation of motor and discharging bearing.
- Special oil return pipe at bottom of the shell and tube, to prevent the oil storage and compressor oil lack
- Well radiating and waterproof of electric control box thanks to special waterproof design
- Higher heat exchange efficiency thanks to Double-flow design.
- Main module patent! Any unit can be set as main module via wired controller.
- Modular design. Up to 8 units can be integrated freely achieving maximum capacity of 3.440kw
- Auto anti-freezing function under heating mode when the unit is switched off

| ITEM | Water Side | | Air Side | |
|---|---|---|---|---|
| | Water Flow ($m^3$/(h.kw)) | Outlet Water Temperatrue (°C) | DB Temperatrue (°C) | WB Temperatrue (°C) |
| Cooling | 0.172 | 7 | 35 | - |

| ITEM | Operating Range | | |
|---|---|---|---|
| | Water Side | | Air Side |
| | Outlet Water Temperature (°C) | Temperature Difference between Inlet&Outlet (°C) | DB Temperatrue (°C) |
| Cooling | 5~15 | 2.5~8 | 18~52 |

Modular structure

Diagnosis displaying

Wired controller

For Heat Pump Units Only

| MODEL | | | IWCBLGF230MT3/Nb-M | IWCBLGF350MT3/Nb-M | IWCBLGF430MT3/Nb-M |
|---|---|---|---|---|---|
| Capacity | | kW | 230 | 350 | 430 |
| | | TR | 65 | 100 | 122 |
| Capacity Steps % | | | 25-50-75-100 | | |
| EER (W/W) | | | 2.88 | 2.8 | 2.83 |
| Power Supply (V/Ph/Hz) | | | 380V/3Ph/50Hz | | |
| Power Input (kW) | | | 80 | 125 | 152 |
| Compressor | | Type | Semi-hermetic screw | | |
| | | Quantity | 1 | 1 | 1 |
| Water Side Heat Exchanger | Type | | Shell and tube | | |
| | Water Flow Volume ($m^3$/h) | | 142.56 | 216.72 | 266.4 |
| | Pressure drop (kPa) | | ≤ 50 | ≤ 50 | ≤ 50 |
| | Connection pipe | | DN100 | DN100 | DN125 |
| Air Side Heat Exchanger | Type | | High-efficient fin tube | | |
| | Fan type and quantity | | axial x 4 | axial x 6 | axial x 8 |
| | Total fan air flow | $m^3$/h | $10x10^4$ | $15x10^4$ | $20x10^4$ |
| | | CFM | $5.9x10^4$ | $8.8x10^4$ | $11.8x10^4$ |
| | Total fan motor power (kW) | | 2.0x4 | 2.0x6 | 2.0x8 |
| Sound pressure level (dB(A)) | | | 78 | 79 | 80 |
| Dimension (WxDxH) | Outline (mm) | | 3.150x2.100x2.300 | 4.330x2.100x2.300 | 5.250x2.100x2.300 |
| | Package (mm) | | 3.230x2.180x2.300 | 4.410x2.180x2.300 | 5.330x2.180x2.300 |
| Weight | net/gross/operating (kg) | | 3.110/3.130/3.421 | 4.600/4.620/5.060 | 5.330/5.350/5.863 |

# WATER COOLED SCREW CHILLERS R134a

Completed protection

Compact design

- High coefficient of performance, nearly 1/3 more energy saving than ordinary chiller unit. For wide working range, the machine may run within25%-100% energy range.
- Water flow switch kit.
- Reserved interface for water pump and cooling tower.
- Flooded type evaporator.
- Multi compressor paralleling technology for high capacity units.
- Orifice throttle disc integrated with electronic expansion valve technology.
- Automatic stepless or stepped capacity adjustment.
- Compact design.
- Reliable oil return system.
- High efficient oil separator system thanks to mechanical and adsorptive fractionation devices.
- Accurate high-pressure liquid injection oil return technology.
- Low oil level protection technology.
- Completed safeties
- LCD control panel (optional to upgrade to colorful touch screen control panel).
- Long distance monitoring and centralized control (optional).
- New model up to 1395.0 kW/396.6 RT cooling capacity

| Operating Condition of Nominal Cooling | | | | Operating Range | | | |
|---|---|---|---|---|---|---|---|
| Chilled Water | | Cooling Water | | Chilled Water | | Cooling Water | |
| Outlet water Temp. (°C ) | Water flow volume $m^3/(h.kw)$ | Inter water Temp. (°C) | Water flow volume $m^3/(h.kw)$ | Outlet water Temp. (°C ) | Temp. difference between inlet & outlet (°C) | Inter water Temp. (°C ) | Temp. difference between inlet & outlet (°C) |
| 7 | 0.172 | 30 | 0.215 | 5~15 | 2.5~8 | 18~35 | 3.5~8 |

| MODEL | | | IWCBLG180H/Nb-M | IWCBLG210H/Nb-M | IWCBLG240H/Nb-M | IWCBLG300H/Nb-M |
|---|---|---|---|---|---|---|
| Cooling capacity (kW/RT) | | | 175 / 49.8 | 202/57.4 | 231/65.7 | 292/83 |
| Cooling control | | | Continuous adjustment | | | |
| IPLV (W/W) | | | 5.58 | 5.63 | 5.72 | 5.81 |
| EER (W/W) | | | 5 | 5.05 | 5.13 | 5.21 |
| Power input (kW) | | | 35 | 40 | 45 | 56 |
| Power supply (V/Ph/Hz) | | | 380V/3Ph/50Hz | | | |
| Com-pressor | Type | | semi-hermetic twin screw compressor | | | |
| | Starting mode | | Y - Δ or Part Winding | | | |
| | Quantity | | 1 | 1 | 1 | 1 |
| Refrigerant Charge volume (Kg) | | | 100 | 100 | 100 | 110 |
| Refrigerant oil | Category | | BSE170 | | | |
| | Charge volume (L) | | 15 | 15 | 15 | 22 |
| Evaporator | Type | | flooded shell and tube | | | |
| | Water flow volume | $m^3/h$ | 30.24 | 34.22 | 39.6 | 50.4 |
| | | l/s | 8.4 | 9.7 | 11.0 | 14.0 |
| | Pressure drop | kPa | 40 | 45 | 50 | 60 |
| | | ft.WG | 13.4 | 15.1 | 16.7 | 20.1 |
| | Connection pipe (mm) | | DN100 | DN100 | DN100 | DN125 |
| Condenser | Type | | shell and tube | | | |
| | Water flow volume | $m^3/h$ | 37.8 | 43.56 | 49.68 | 62.64 |
| | | l/s | 10.5 | 12.1 | 13.8 | 17.4 |
| | Pressure drop | kPa | 56 | 57 | 65 | 65 |
| | | ft.WG | 18.7 | 19.1 | 21.8 | 21.8 |
| | Connection pipe (mm) | | DN100 | DN100 | DN100 | DN125 |
| Sound pressure level (dB(A)) | | | 76.2 | 76.6 | 77.4 | 80.1 |
| Outline dimension | Width (mm) | | 3.160 | 3.160 | 3.160 | 3.160 |
| | Depth (mm) | | 1.150 | 1.150 | 1.150 | 1.400 |
| | Height (mm) | | 1.587 | 1.587 | 1.587 | 1.680 |
| Net weight (Kg) | | | 1.800 | 1.900 | 2.100 | 2.800 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | IWCBLG450H/Nb-M | IWCBLG500H/Nb-M | IWCBLG580H/Nb-M | IWCBLG640H/Nb-M |
| Cooling capacity (kW/RT) | | | | 376/106.9 | 442/125.7 | 495/140.7 | 572/162.6 | 636/180.8 |
| Cooling control | | | | | | | | |
| IPLV (W/W) | | | 5.86 | 5.90 | 5.94 | 5.93 | 5.96 | |
| EER (W/W) | | | 5.25 | 5.30 | 5.33 | 5.32 | 5.35 | |
| Power input (kW) | | | 63 | | 83 | | 107 | |
| Power supply (V-Ph-Hz) | | | | | | | | |
| Com-pressor | Type | | | | semi-hermetic twin screw compressor | | | |
| | Starting mode | | | | Y - Δ | | | |
| | | | 1 | 1 | | | | 1 |
| | | | 120 | 130 | | 210 | 210 | |
| Refrigerant oil | Category | | | | | | | |
| | Charge volume (L) | | 19 | 19 | 35□ | | 35□ | |
| Evaporator | Type | | | | | | | |
| | Water flow volume | m /h | 5649 | 64.8 | 76.0 | 85.3 | 98.3 | 109 4 |
| | Pressure drop | kPa | | | | | | |
| | | ft.WG | 2041 | 2047 | | 22.1 | 22.8□ | |
| | Connection pipe (mm) | | | | | | | |
| Condenser | Water flow volume | m³/h | 71.3 | 81 | 95.0 | 106.6 | | 136.8 |
| | | l/s | 19 8 | 22 5 | 26 4 | 29.6 | 34.2 | 38 |
| | | kPa | | | | | | |
| | | ft.WG | 2241 | 22.4□ | | 23.8□ | 24.1 | |
| | Connection pipe (mm) | | DN125□ | DN125□ | DN150 | DN150 | DN150 | |
| Sound pressure level (dB(A)) | | | 8142□ | 83.3□ | | 84.1 | 84.3□ | |
| Outline dimension | Width (mm) | | 3.160 | 3.160 | 3.160 | 3.160 | 3.160 | 3160 |
| | Depth (mm) | | 1.400 | 1.400 | 1.520 | 1.520 | | 1520 |
| | Height (mm) | | 1.680 | 1.720 | 24130 | 24130 | | |
| Net weight (Kg) | | | 2.900 | 3.100 | 3.850 | 4.100 | | |

| MODEL | | | IWCBLG680H/Nb-M | IWCBLG760H/Nb-M | IWCBLG880H/Nb-M | IWCBLG1000H/Nb-M | IWCBLG1160H/Nb-M | IWCBLG1280H/Nb-M |
|---|---|---|---|---|---|---|---|---|
| Cooling capacity (kW/RT) | | | 676/192.2 | 752/213.8 | | 990/28145 | | 1275/36245 |
| Cooling control | | | | | Continuous adjustment | | | |
| IPLV (W/W) | | | 5498 | 5490 | 5496 | 5493 | 5496 | |
| EER (W/W) | | | 5437□ | 5430 | 5434 | 5432 | 5435 | |
| Power input (kW) | | | | 142 | 163 | 186 | 214 | |
| Power supply (V-Ph-Hz) | | | | | 380V-3N-50Hz | | | |
| Com-pressor | Type | | | | semi-hermetic twin screw compressor | | | |
| | Starting mode | | | | Y - Δ or Part Winding | | | |
| | Quantity | | 2□ | 2□ | | 2□ | 2□ | 2□ |
| Refrigerant Charge volume (Kg) | | | 350 | 350 | 350 | 350 | 350 | |
| Refrigerant oil | Category | | | | BSE170□ | | | |
| | Charge volume (L) | | 19*2□ | 19*2□ | 35*2□ | 35*2□ | 35*2□ | 35*2□ |
| Evaporator | Type | | | | flooded shell and tube□ | | | |
| | Water flow volume | m³/h | 116.3□ | 129.2 | 149.8 | 170.3 | 196.9 | 219.2 |
| | | l/s | 32.3 | 35.9 | 41.6 | 47.3 | 54.7 | 60.9 |
| | Pressure drop | kPa | 76□ | 76□ | 76□ | | 78□ | 78□ |
| | | ft.WG | 25.4□ | 25.4□ | 25.4□ | 25.8□ | 26.1□ | |
| | Connection pipe (mm) | | DN200□ | DN200□ | DN200□ | DN200□ | DN200□ | DN200□ |
| Condenser | Type | | | | shell and tube□ | | | |
| | Water flow volume | m³/h | 145.4□ | 161.6 | 187.2 | 212.8 | 245.9 | 274.0 |
| | | l/s | 40.4 | 44.9 | 52.0 | 59.1 | 68.3 | 76.1□ |
| | Pressure drop | kPa | 76□ | 77□ | 82 | | 84□ | 85□ |
| | | ft.WG | 25.4□ | 25.8□ | 27.4□ | 27.8□ | 28.1□ | |
| | Connection pipe (mm) | | DN200□ | DN200□ | DN250□ | DN250□ | DN250□ | DN250□ |
| Sound pressure level (dB(A)) | | | 82.5□ | 84.6□ | 85.2□ | 85.4□ | 85.6□ | |
| Outline dimension | Width (mm) | | 3.400□ | 3.400□ | 3.900□ | 3.900□ | 3.900□ | 3.900□ |
| | Depth (mm) | | 1.700□ | 1.700□ | 1.900□ | 1.900□ | 1.900□ | 1.900□ |
| | Height (mm) | | 2.030 | 2.030 | 2.230 | 2.230 | 2.230 | 2.230 |
| Net weight (Kg) | | | 5.100 | 5.500 | 6.200 | 6.500 | 6.800 | 7.000 |

# FAN COIL UNITS

## CONCEALED CEILING TYPE

## FLOOR CEILING TYPE

## WALL MOUNTED TYPE

## CASSETE TYPE

- Light weight and high air volume thanks to plastic fun structure
- 3-speed motor

Compact design

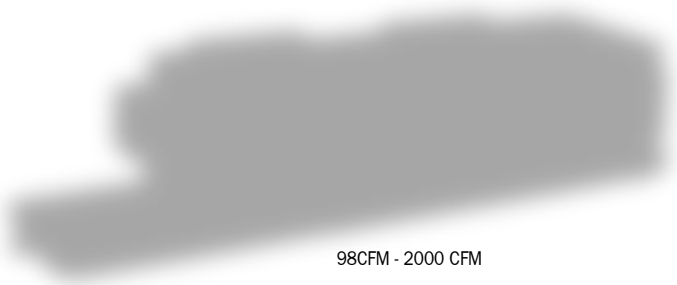
Quiet design

Long life and washable filter

Light weight

| ITEM | Nominal Test Condition | | | |
|---|---|---|---|---|
| | DB Temperature (°C) | WB Temperature (°C) | Inlet Temperature (°C) | Temperature Difference (°C) |
| Cooling | 27 °C | 19 °C | 7 °C | 12 °C |
| Heating | 21 °C | - | 60 °C | - |

# CONCEALED CEILING TYPE



98CFM - 2000 CFM

Wireless

FCU Wired remote controller WK-010PA-K

High, mid and low joints of switch Z54352A1

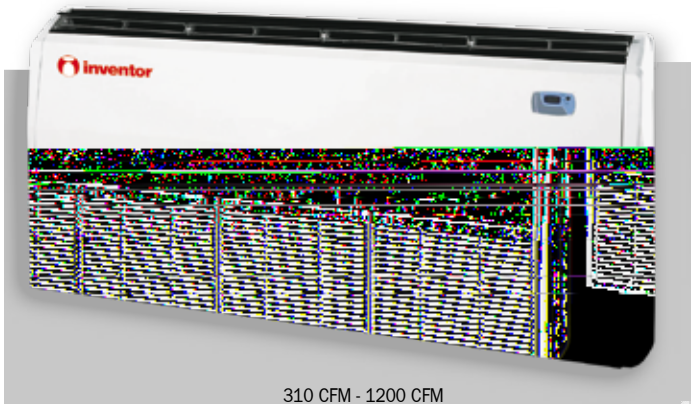
Digital fan coil thermostat WK-110PA0

- Excellent outside condensate-water proof performance thanks to compression-moulding chassis with integrated heat-insulating material.
- Slim design
- Low noise
- Inner groove copper
- Hot galvanized steel case
- Various type of controller available (optional)
- Different kind of wired remote control available (optional)
- 3way valve(optional)
- Long life and washable filter with air return box(optional)
- Also available with 2, 4, 3 + 1 rows

| MODEL | | IFC-34WAS-R | IFC-51WAS-R | IFC-68WAS-R | IFC-85WAS-R |
|---|---|---|---|---|---|
| Air flow volume | High (CFM) | 200 | 300 | 400 | 500 |
| | Medium (CFM) | 146 | 232 | 291 | 375 |
| | Low (CFM) | 125 | 155 | 194 | 250 |
| External statics pressure (Pa) | | 30 | | | |
| Capacity | Cooling (kW) | 2.19 | 3.37 | 4.28 | 5.04 |
| | Heating (kW) | 3.29 | 5.06 | 6.42 | 7.56 |
| Power system | Type (V/Ph/Hz) | 220V-240-1Ph-50Hz | | | |
| | Input (W) | 44 | 59 | 72 | 87 |
| Water system | Water flow volume ($m^3/h$) | 0.396 | 0.61 | 0.792 | 0.90 |
| | Pressure drop (kPa) | 10 | 15 | 25 | 30 |
| Sound pressure level (dB(A)) | | 38 | 40 | 42 | 44 |
| Connection pipe size | Water inlet outlet pipe (Inch) | 3/4»(inner groove) | | | |
| | Condensing water drain pipe (Inch) | 3/4»(outer groove) | | | |
| Outline Dimension (WXDXH) (mm) | | 881x510x245 | 1.011x510x245 | 1.131x510x245 | 1.211x510x245 |
| Package Dimension (WXDXH) (mm) | | 900x560x275 | 1.030x560x275 | 1.150x560x275 | 1.230x560x275 |
| Net weight (Kg) | | 15 | 16 | 18 | 19.5 |
| Gross weight (Kg) | | 19 | 20.5 | 23 | 24.5 |
| Optional Parts | Wireless remote controller | NA | | | |
| | Wired remote controller | Luxury wired controller:WK-010PA-K;LCD Controller WK-110PA | | | |
| | Air return box (without filter) | HF41 | HF42 | HF43 | HF44 |
| | Air return box (with filter) | HF31 | HF32 | HF33 | HF34 |

| MODEL | | IFC-272WAS-R | IFC-306WAS-R | IFC-340WAS-R |
|---|---|---|---|---|
| Air flow volume | Medium (CFM) | | | |
| | Low (CFM) | | | |
| External statics pressure (Pa) | | 30 | | |
| Capacity | Cooling (kW) | | | |
| | Heating (kW) | | 24.8 | 2611 |
| Power system | Type (V/Ph/Hz) | 220-240V/1Ph/50Hz | | |
| | Input (W) | | | |
| Water system | | 2.30 | 2.66 | |
| Sound pressure level (dB(A)) | | 56 | 59 | 62 | 63 |
| pipe size | Water inlet outlet pipe (Inch) | | | |
| | Condensing water drain pipe (Inch) | | | |
| Outline Dimension (WxDxH) (mm) | | 1.671x595x354 | 1.671x595x354 | 1.921x595x354 | 1.921x595x354 |
| Package Dimension (WxDxH) (mm) | | 1.750x650x380 | 1.750x650x380 | 1.950x650x380 | 1.950x650x380 |
| Gross weight (Kg) | | 55 | 55 | 60 | 60 |
| Optional Parts | Wireless remote controller | | | | |
| | Wired remote controller | Luxury wired controller:WK-010PA-K;LCD Controller WK-110PA | | | |
| | | | | NA | NA |
| | Air return box (with filter) | | | | |

# FLOOR CEILING TYPE




310 CFM - 1200 CFM

Wireless
(Standard)

- Slim design
- Low noise
- Plastic case
- Wireless remote control fitted as standard
- Long life and washable filter
- Inner groove copper
- Auto clean
- Anti - cold function
- Wireless remote control fitted as standard
- Self diagnosis

| MODEL | | IFC-34WM-K | IFC-51WM-K | IFC-68WM-K | IFC-85WM-K | IFC-102WM-K | IFC-136WM-K | IFC-170WM-K | IFC-204WM-K |
|---|---|---|---|---|---|---|---|---|---|
| Air flow volume | High (CFM) | 200 | 300 | 400 | 500 | 600 | 800 | 1000 | 1200 |
| | Medium (CFM) | 146 | 232 | 291 | 375 | 464 | 644 | 750 | 926 |
| | Low (CFM) | 125 | 155 | 194 | 250 | 309 | 429 | 500 | 618 |
| Capacity | Cooling (kW) | 1.8 | 2.8 | 3.6 | 4.5 | 5.4 | 7.2 | 9.0 | 10.8 |
| | Heating (kW) | 2.8 | 4.2 | 5.4 | 6.8 | 8.1 | 10.8 | 13.5 | 16.2 |
| Power system | Type (V/Ph/Hz) | 220-240V/1Ph/50Hz | | | | | | | |
| | Input (W) | 40 | 40 | 62 | 77 | 99 | 162 | 240 | 275 |
| Water system | Water flow volume ($m^3/h$) | 0.36 | 0.5 | 0.65 | 0.790 | 0.94 | 1.30 | 1.51 | 1.94 |
| | Pressure drop (Kpa) | 9.8 | 9.8 | 36.5 | 36.5 | 30.8 | 34.8 | 38.4 | 42.8 |
| Sound pressure level (dB(A)) | | 48 | 48 | 49 | 49 | 49 | 51 | 52 | 55 |
| Connection pipe size | Water inlet & outlet (Inch) | 3/4, (outer groove) | | | | | | | |
| | Condensing water drain (Inch) | 3/4, (outer groove) | | | | | | | |
| Outline dimension (WxDxH) (mm) | | 834x238x694 | 834x238x694 | 1.300x188x600 | 1.300x188x600 | 1.300x188x600 | 1.590x238x695 | 1.590x238x695 | 1.590x238x695 |
| Package dimension (WxDxH) (mm) | | 960x330x830 | 960x330x830 | 1.414x248x724 | 1.414x248x724 | 1.414x248x724 | 1.714x330x830 | 1.714x330x830 | 1.714x330x830 |
| Net weight (kg) | | 26 | 26 | 34 | 34 | 34 | 48.5 | 48.5 | 48.5 |
| Gross weight (kg) | | 35 | 35 | 38 | 38 | 38 | 57 | 57 | 57 |
| Standard controller | | Wireless remote controller - Y512 | | | | | | | |

# CASSETE TYPE

303 CFM - 1176 CFM

Wireless

FCU Wired remote controller Z4E351B

- Compact and light weight
- Low noise
- Different kind of wired control available (optional)
- Wireless remote control fitted as standard
- Long life and washable filter
- Water pump fitted as standard
- Inner groove copper
- Anti - cold function
- Self diagnosis

| MODEL | | IFC-85XD/B-T | IFC-102XD/B-T | IFC-125XD/B-T | IFC-140XD/B-T | IFC-160XD/B-T | IFC-180XD/B-T | IFC-200XD/B-T |
|---|---|---|---|---|---|---|---|---|
| Air flow volume | High (CFM) | 500 | 600 | 735 | 841 | 965 | 1060 | 1176 |
| | Medium (CFM) | 375 | 464 | 606 | 802 | 853 | 1035 | 994 |
| | Low (CFM) | 303 | 362 | 538 | 705 | 781 | 932 | 860 |
| Capacity | Cooling (kW) | 4.64 | 5.4 | 6.7 | 7.74 | 8.7 | 9.6 | 13 |
| | Heating (kW) | 7.5 | 9.1 | 10.5 | 11.2 | 12.9 | 14.6 | 19 |
| Power system | Type (V/Ph/Hz) | 220-240V/1Ph/50Hz | | | | | | |
| | Input (W) | 100 | 100 | 150 | 140 | 150 | 180 | 200 |
| Water system | Water flow volume ($m^3/h$) | 0.828 | 0.936 | 1.188 | 1.368 | 1.548 | 1.692 | 2.304 |
| | Pressure drop (Kpa) | 15 | 19 | 21 | 21 | 31 | 36 | 37 |
| Sound pressure level (dB(A)) | | 46 | 46 | 47 | 48 | 53 | 54 | 58 |
| Connection pipe size | Water inlet & outlet (Inch) | 3/4 | | | | | | |
| | Condensing water drain (mm) | 33 | | | | | | |
| Outline dimension (WxHxD) (mm) | Body | 840x840x240 | | | 840x840x320 | | | |
| | Panel | 950x950x85 | | | 950x950x85 | | | |
| Package dimension (WxHxD) (mm) | Body | 960x960x310 | | | 960x960x394 | | | |
| | Panel | 1030x1035x118 | | | 1030x1035x118 | | | |
| Net weight (kg) | Body | 27 | | | 33 | | | |
| | Panel | 7 | | | 7 | | | |
| Gross weight (kg) | Body | 35 | | | 42 | | | |
| | Panel | 11 | | | 11 | | | |
| Standard controller | | Wireless remote controller - YB1FA(X-FAN) | | | | | | |
| Optionals | | Luxury wired remote controller : Z4E3518 | | | | | | |

# CASSETE TYPE

210 CFM - 1090 CFM

Wireless

FCU Wired remote controller Z4E351B

- Compact and light weight
- Low noise
- Different kind of wired control available (optional)
- Wireless remote control fitted as standard
- Long life and washable filter
- Water pump fitted as standard
- Inner groove copper
- Anti - cold function
- Self diagnosis

| MODEL | | IFC-51XD-E | IFC-68XD-E | IFC-8XD-E | IFC-10XD-E |
|---|---|---|---|---|---|
| Air flow volume | High (CFM) | 300 | 371 | 500 | 600 |
| | Medium (CFM) | 247 | 318 | 375 | 464 |
| | Low (CFM) | 205 | 265 | 303 | 363 |
| Capacity | Cooling (kW) | 3.0 | 3.5 | 4.64 | 5.4 |
| | Heating (kW) | 4.0 | 5.0 | 7.50 | 9.1 |
| Power system | Type (V/Ph/Hz) | 220-240V/1Ph/50Hz | | | |
| | Input (W) | 49.0 | 56 | 100 | 100 |
| Water system | Water flow volume ($m^3/h$) | 0.5 | 0.61 | 0.83 | 0.94 |
| | Pressure drop (Kpa) | 5 | 9 | 15 | 25 |
| Sound pressure level (dB(A)) | | 43 | 48 | 46 | 46 |
| Connection pipe size | Water inlet & outlet (Inch) | 3/4, (outer groove) | | | |
| | Condensing water drain (mm) | 25 | | | |
| Outline dimension (WxHxD) (mm) | Body | 600x230x600 | 600x230x600 | 840x320x840 | 840x320x840 |
| | Panel | 650x50x650 | 650x50x650 | 960x60x960 | 960x60x960 |
| Package dimension (WxHxD) (mm) | Body | 848x310x678 | 848x310x678 | 960x394x960 | 960x394x960 |
| | Panel | 730x102x670 | 730x102x670 | 1.025x115x1.040 | 1.025x115x1.040 |
| Net weight (kg) | Body | 19.3 | 19.3 | 30 | 30 |
| | Panel | 5 | 5 | 6.5 | 6.5 |
| Gross weight (kg) | Body | 27 | 27 | 38 | 38 |
| | Panel | 6 | 6 | 10 | 10 |
| Standard controller | | Wireless remote controller - Y512 | | | |
| Optionals | | Luxury wired remote controller : Z4E351B | | | |

# CASSETE TYPE

210 CFM - 1090 CFM

Wireless

FCU Wired remote controller Z4E351B

| MODEL | | IFC-12.5XD-E | IFC-14XD-E | IFC-16XD-E | IFC-18XD-E |
|---|---|---|---|---|---|
| Air flow volume | High (CFM) | 735 | 840 | 965 | 1059 |
| | Medium (CFM) | 606 | 802 | 853 | 1035 |
| | Low (CFM) | 538 | 705 | 781 | 932 |
| Capacity | Cooling (kW) | 6.7 | 7.74 | 8.7 | 9.6 |
| | Heating (kW) | 10.5 | 11.2 | 12.9 | 14.6 |
| Power system | Type (V/Ph/Hz) | 220-240V/1Ph/50Hz | | | |
| | Input (W) | 150 | 140 | 160 | 155 |
| Water system | Water flow volume (m³/h) | 1.19 | 1.37 | 1.55 | 1.69 |
| | Pressure drop (Kpa) | 25 | 25 | 27 | 29 |
| Sound pressure level (dB(A)) | | 47 | 52 | 53 | 54 |
| Connection pipe size | Water inlet & outlet (Inch) | 3/4, (outer groove) | | | |
| | Condensing water drain (mm) | 25 | | | |
| Outline dimension (WxHxD) (mm) | Body | 840x320x840 | 840x320x840 | 840x320xt840 | 840x320x840 |
| | Panel | 960x60x960 | 960x60x960 | 960x60x960 | 960x60x960 |
| Package dimension (WxHxD) (mm) | Body | 960x394x960 | 960x394x960 | 960x394x960 | 960x394x960 |
| | Panel | 1.025x115x1040 | 1.025x115x1040 | 1.025x115x1040 | 1.025x115x1.040 |
| Net weight (kg) | Body | 30 | 38 | 38 | 38 |
| | Panel | 6.5 | 6.5 | 6.5 | 6.5 |
| Gross weight (kg) | Body | 38 | 46 | 46 | 46 |
| | Panel | 10 | 10 | 10 | 10 |
| Standard controller | | Wireless remote controller - Y512 | | | |
| Optionals | | Luxury wired remote controller : Z4E351B | | | |

# WALL MOUNTED TYPE

193CFM - 330 CFM

Wireless

FCU Wired remote controller Z4E351B

- Compact and light weight
- Low noise
- Condensed water free
  Water pan is produced by mounting with heat preservation material wholly pressed, there is no bothering for condensed water.
- Different kind of wired remote control available (optional)
- Wireless remote control fitted as standard
- Long life and washable filter
- Inner groove copper
- Anti - cold function
- Self diagnosis

| MODEL | | Standard Type | | | | With 3-way valve | |
|---|---|---|---|---|---|---|---|
| | | IFC-34BA2/A-K | IFC-51BA2/A-K | IFC-68BA2/A-K | IFC-85BA2/A-K | IFC-51BWA2/A-K | IFC-85BWA2/A-K |
| Air flow volume | High (CFM) | 212 | 324 | 400 | 500 | 265 | 588 |
| | Medium (CFM) | 189 | 242 | 347 | 416 | 225 | 493 |
| | Low (CFM) | 166 | 215 | 312 | 362 | 190 | 423 |
| Capacity | Cooling (kW) | 2.1 | 2.7 | 3.6 | 4.2 | 1.5 | 5.4 |
| | Heating (kW) | 3.15 | 4.05 | 5.4 | 6.3 | 2.25 | 8.5 |
| Power system | Type (V/Ph/Hz) | 220-240V/1Ph/50Hz | | | | | |
| | Input (W) | 50 | 50 | 60 | 60 | 50 | 70 |
| Water system | Water flow volume ($m^3/h$) | 0.40 | 0.47 | 0.61 | 0.68 | 0.29 | 0.86 |
| | Pressure drop (Kpa) | 13 | 24 | 44 | 45 | 37 | 63 |
| Sound pressure level (dB(A)) | | 35 | 40 | 43 | 48 | 42 | 49 |
| Connection pipe size | Water inlet & outlet (Inch) | 1/2 | | | | | |
| | Condensing water drain (mm) | 15.6 | | | | | |
| Outline dimension (WxHxD) (mm) | | 845x275x180 | 845x275x180 | 940x298x200 | 940x298x200 | 845x275x180 | 940x298x200 |
| Package dimension (WxHxD)) (mm) | | 915x355x255 | 915x355x255 | 1.010x380x285 | 1.010x380x285 | 915x355x255 | 1.010x380x285 |
| Net weight (kg) | | 11 | 11 | 13 | 13 | 11 | 13 |
| Gross weight (kg) | | 14 | 14 | 17 | 17 | 14 | 17 |
| Standard controller | | YB1FA | | | | | |

# notes